



user manual

smappee monitor

Safety Instructions

Safety precautions

Please observe the following safety precautions in order to avoid potential electrical shock, fire or personal injury:

- Do not use this product for any purpose other than for which it was intended.
- Do not open the equipment or touch any of its electronic circuitry.
- Do not attempt to repair or service any part of the smappee monitor.
- Only use the cables which were delivered with the product.
- Do not use the product if damaged.
- Do not use damaged current clamp cables
- Do not immerse the product in water, or any other liquids.
- Do not expose the product to heat, flame, steamy conditions or extreme cold.
- Do not open the equipment or touch any of its electronic circuitry.

Specifications

- Dimensions: 16 cm (L) x 10 cm (B) x 3,5 cm (H)
- Weight: 300g
- Wi-Fi 802.11 b/g/n 2.4 GHz
- Operating temperature: 0 - 40°C
- Storage temperature: -10 - 60°C
- Relative humidity: 80% at 0 - 40°C
- Ingress Protection: IP 20
- Operating altitude: 0 – 2.000 m
- EMC: EN 55022 (Class B)
- Safety: EN61010-1 Ed 3.0 (2010-06), EN61010-2-032 Ed 3.0 (2012-09)
- Overvoltage protection: 300 V/CAT II

Smappee Wi-Fi installation

The first step for installing the smappee monitor is to establish a connection with your Wi-Fi network.

We strongly recommend performing the steps below near your Wi-Fi router. Once the connection is established (when smappee shows a green heartbeat) you can move your smappee to the place of final installation.

For connecting to your Wi-Fi network, you can opt for the procedure with WPS in case your router supports WPS.



The following sections explain:

- procedure without WPS (entry of Wi-Fi name and password)
- procedure with WPS
- troubleshooting

Procedure without WPS

The following steps describe the smappee Wi-Fi installation by using the Wi-Fi network name (SSID) and password.

Starting the smappee monitor

1. Put the plug in the power outlet. Smappee emits a blue light for 20 sec.
2. Next, the light goes off for 30 sec.
3. After about 60 sec, smappee shows a blue heartbeat.

Preparing the smartphone app

4. Note: The smappee monitor will connect to the same network as the Wi-Fi network to which your smartphone/tablet is currently connected.
5. Start the app and select <Login>
6. Create an account if you haven't yet done so. Note: This account is completely independent from any accounts you may have created on the smappee webshop.
7. Select <Login>
8. Select <Install>
9. Uncheck <via WPS>
10. Enter your Wi-Fi password

Chirping

11. Set the volume of your smartphone/Tablet at ca. two-thirds of the maximum and hold it at ca. 15 à 20 cm (6 à 8 inches) of your smappee monitor en then press "START". Note: iPhone and iPad users need to ensure that the ring signal switch is on.
12. You will now hear the smappee chirp sound and the text "Chirping info to smappee" is displayed.
13. The yellow light blinks if smappee records the sound well. If not, start again as of step <11.> and press <Repeat>
14. After having recorded the chirp sound, smappee verifies that the data has been well received:
 - a. If all is OK, the **green** light goes on for ca. 3 sec.
 - b. In case of errors, the **red** light goes on for ca. 3 sec and then the blue heartbeat starts again. Start again as of step <11.> and press <Repeat >

Restart - Green heartbeat

15. After a successful chirp procedure, smappee needs to restart. You'll notice a blue light for ca. 60 sec.
16. Next, smappee connects to the Wi-Fi network and establishes a connection with the smappee servers.
17. Smappee validates a successful connection with a **green heartbeat**.
18. You can now connect your smappee to the electrical installation of your home (continue on page 7).

In case of errors

- If the connection with the Wi-Fi network fails, the red light flashes for about 5 sec. Next, the blue heartbeat starts again. Check your Wi-Fi password en start again as of step <11.>
- See section Troubleshooting on page 6 for more information.

Procedure with WPS

The following steps describe the smappee Wi-Fi installation by using WPS.



Starting the smappee monitor

1. Put the plug in the power outlet. Smappee emits a blue light for 20 sec.
2. Next, the light goes off for 30 sec.
3. After about 60 sec, smappee shows a blue heartbeat.

Preparing the smartphone app

4. Start the app and select <Login>.
5. Create an account if you haven't yet done so. Note: This account is completely independent from any accounts you may have created on the smappee webshop.
6. Select <Login>.
7. Select <Install>.
8. Check <via WPS>.

Chirping

9. Set the volume of your smartphone/Tablet at ca. two-thirds of the maximum and hold it at ca. 15 à 20 cm (6 à 8 inches) of your smappee monitor en then press "START". Note: iPhone and iPad users need to ensure that the ring signal switch is on.
10. You will now hear the smappee chirp sound and the text "Chirping info to smappee" is displayed.
11. The yellow light blinks if smappee records the sound well. If not, start again as of step <9.> and press <Repeat>
12. After having recorded the chirp sound, smappee verifies that the data has been well received:
 - a. If all is OK, the **green** light goes on for ca. 3 sec.
 - b. In case of errors, the **red** light goes on for ca. 3 sec and then the blue heartbeat starts again. Start again as of step <9.> and press <Repeat >
13. Next, the magento light blinks. Now, press the WPS button on your router.

Restart - Green heartbeat

14. Once the WPS procedure has been completed, smappee restarts. The light goes off for ca. 30 sec. and then, smappee shows a blue light for ca. 60 sec.
15. Next, smappee connects to the Wi-Fi network and establishes a connection with the smappee servers.
16. Smappee indicates a successful connection with a **green heartbeat**.
17. You can now connect your smappee to the electrical installation of your home (continue on page 7).

In case of errors

- If the connection with the Wi-Fi network fails, the smappee monitor shows a red light. Next, the blue heartbeat starts again. Check your Wi-Fi connection en start again as of step <9.>.
- See section Troubleshooting on page 6 for more information.

Troubleshooting

The smappee monitor will show various lights that indicate the progress of the installation.

Lights during normal use

Color	Meaning	What to do...
Green heartbeat	Successfully installed.	You can start using the smappee App to learn about your energy consumption.
BLUE - continuous	Starting up.	Wait 1-2 minutes.
BLUE - flashing	The smappee monitor is listening for an acoustic message.	Use the App to "install new device". The App will prepare an acoustic message for the smappee monitor.

Lights during the acoustic message

Color	Meaning	What to do...
YELLOW - flashing	Receiving acoustic message.	Keep quiet and wait until the acoustic signal is done.
GREEN - 3 second flash	Acoustic message successfully received.	The smappee monitor will now connect to the smappee servers. Note: Expect the smappee monitor to reboot and show continuous blue for about 1-2 minutes.
RED - 3 second flash	Error during acoustic message. Try again.	Repeat the acoustic message once the BLUE - flashing light is back. Troubleshooting advise: Turn the speaker volume to 40-60 %. Hold it 5 - 20 cm from the smappee monitor. Avoid environmental noise. Be quiet.

Lights in case of problems

Color	Meaning	What to do...
RED - continuous	Never had a Wi-Fi connection since last power up.	Check your Wi-Fi password. Reduce the distance between the Smappee monitor and the Wi-Fi router. Note: Expect the smappee monitor to reboot after a few minutes and show continuous blue.
RED - flashing	Unexpected loss of Wi-Fi signal.	Check the Wi-Fi router. Reduce the distance between the Smappee monitor and the Wi-Fi router.
Purple - continuous	Cannot connect to the smappee cloud.	You did everything correct. Please contact the smappee helpdesk and have your serial number ready.
Blue - continuous (more than 2 minutes)	Cannot connect to Wi-Fi due to wrong credentials.	Make sure the Wi-Fi reception is sufficiently strong. Verify that your smartphone is connected to the correct Wi-Fi network. Check the Wi-Fi password that you entered in the App. You may need to perform a factory reset to be able to repeat the chirp.

Reset to factory defaults

In case you wish to change or remove an existing Wi-Fi password, you need to reset the smappee monitor to the factory defaults.

To do this, locate the button at the side of the smappee monitor. Press it for about 10 seconds until you see a purple blinking light.

Now, the smappee monitor will restart (2 minutes blue light) and then show a blinking blue light. The smappee monitor is now waiting for a new chirp.

Connecting Smappee

This section explains the electrical installation of your smappee monitor.

For more information, see the installation video's on www.smappee.com/be_en/support

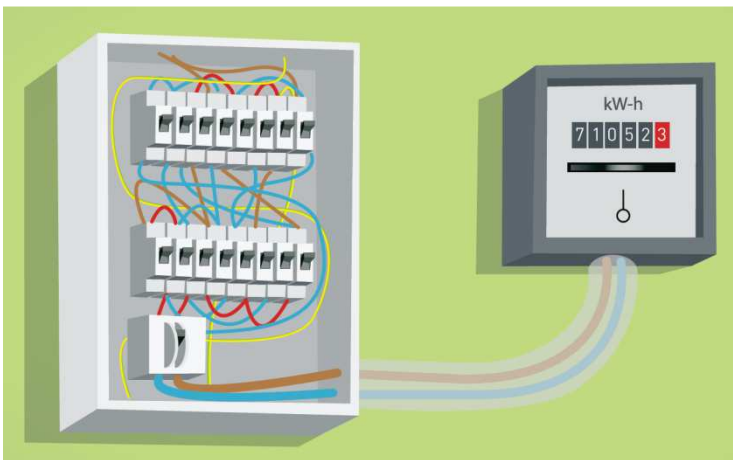
Single Phase Connection

The following instructions describe the installation steps for **single phase** households without solar power.

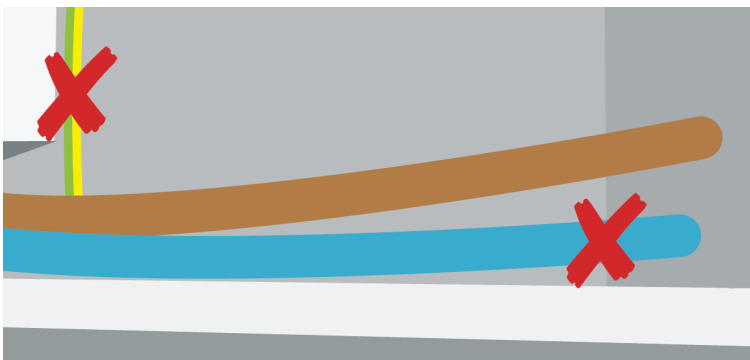
Preconditions: You have successfully connected your smappee monitor to your Wi-Fi network (you see a green heartbeat) as described on page 3.

Steps

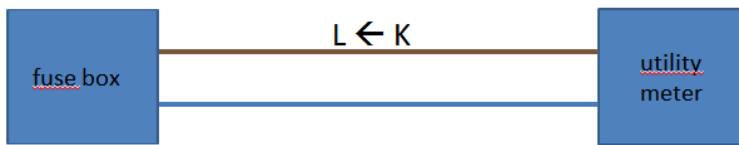
1. Switch the power off to your home using the main breaker. This is usually the largest switch in your meter cabinet.
2. There are 2 cables between the kWh-Meter and the fuse box (typical colors are brown or black and blue). Some houses cabling may not have different colors e.g. both cables may be grey, however in this instance the 2 cables should be clearly labeled L (for live) and N (for neutral).



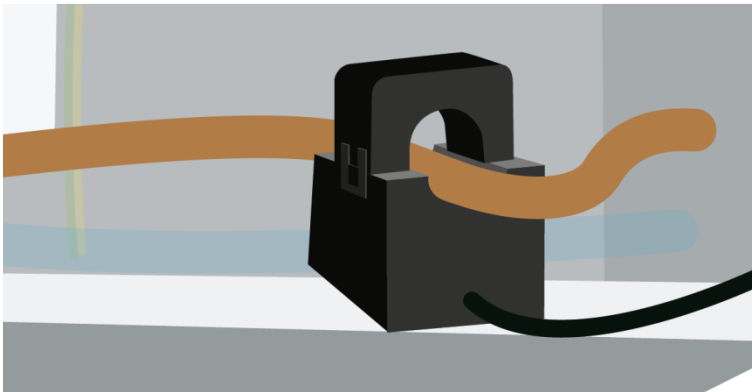
3. The live cable is typically brown or black (or labeled L), the blue cable is the neutral (or labeled N). The Green/Yellow cable is the ground wire.



- Note the symbol " $L \leftarrow K$ " inside the current clamp. Ensure that "L" points towards the fuse box and "K" towards your existing utility meter.



- Put the current clamp around the live cable and close it firmly. If needed, press on the side till you hear a click.



- Connect the other side of the current clamp cable to input "1" of the snappee monitor.



- Switch the power to your home back on.
- Plug the snappee power cable into the nearest available power outlet and wait until snappee shows, again, the green heartbeat. Note: A red light is an indication of a weak Wi-Fi signal.
- You can now get started with your smartphone app (see page 11).

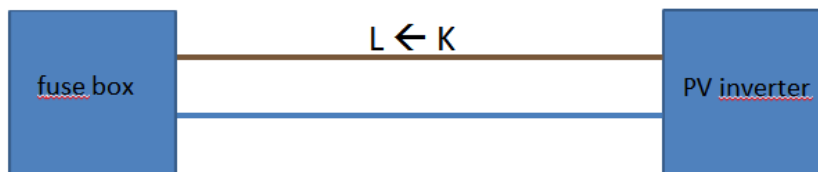
Solar Power Connection

The following instructions describe the installation steps for households with **solar power** (single phase).

Preconditions: You have successfully connected your smappee monitor to your Wi-Fi network (you see a green heartbeat) as described on page 3.

Steps

1. Switch the power off to your home using the main breaker. This is usually the largest switch in your meter cabinet.
2. Disconnect the power supply of your solar panels.
3. Follow the instructions of the Single Phase Connection till and including the connection of the first current clamp.
4. Connect the second current clamp over the live cable (brown or black) coming from the PV inverter. Ensure that “K” points towards the inverter and “L” towards the fuse box. Make sure that the current clamp is firmly closed. If needed, press on the side till you hear a click.



5. Connect the other side of the current clamp cable to input “2” of the smappee monitor.
6. Switch the power back on.
7. Plug the smappee power cable into the nearest available power outlet and wait until smappee shows, again, the green heartbeat. Note: A red light is an indication of a weak Wi-Fi signal.
8. You can now get started with your smartphone app (see page 11).

3 Phase Connection

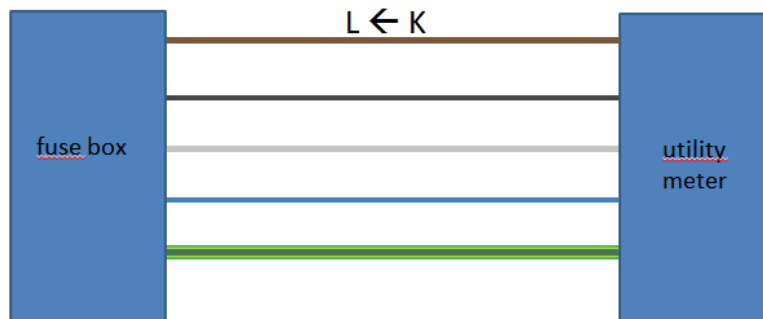
The following instructions describe the installation steps for households with **3 phase** power without solar power.

Preconditions: You have successfully connected your smappee monitor to your Wi-Fi network (you see a green heartbeat) as described on page 3.

Steps

The following instructions describe the installation steps for three phase households.

1. Switch the power off to your home using the main breaker. This is usually the largest switch in your meter cabinet.
2. There are 4 cables between the kWh-Meter and the fuse box (typical colors are “brown, gray, black & blue” or “brown, 2x black & blue”) Some houses cabling may not have different colors e.g. all cables may be grey, however in this instance the 4 cables should be clearly labeled L (for live) and N (for neutral).
3. The live cables are typically brown, black or grey (or labeled L), the blue cable is the neutral (or labeled N). The Green/Yellow cable is the ground wire.
4. Note the symbol “L ← K” inside the current clamp. Ensure that “L” points towards the fuse box and “K” towards your existing utility meter.
5. Put the current clamps around the live cables and close it firmly. If needed, press on the side till you hear a click.



6. Connect the other side of the current clamp cables to input “1, 2 & 3” of the smappee monitor.
7. Switch the power back on.
8. Plug the smappee power cable into the nearest available power outlet and wait until smappee shows, again, the green heartbeat. Note: A red light is an indication of a weak Wi-Fi signal.
9. You can now get started with your smartphone app (see page 11).

Getting started with the smappee app

Now that you have successfully installed smappee, smappee can start working for you right away! You can start checking your consumption immediately. In order to identify your appliances, smappee first needs to get to know your house. This takes a little time, but smappee will generally have identified its first appliances after half a day.

The main screen of the smappee app is the bubble screen. Here, you can see the following at a single glance:

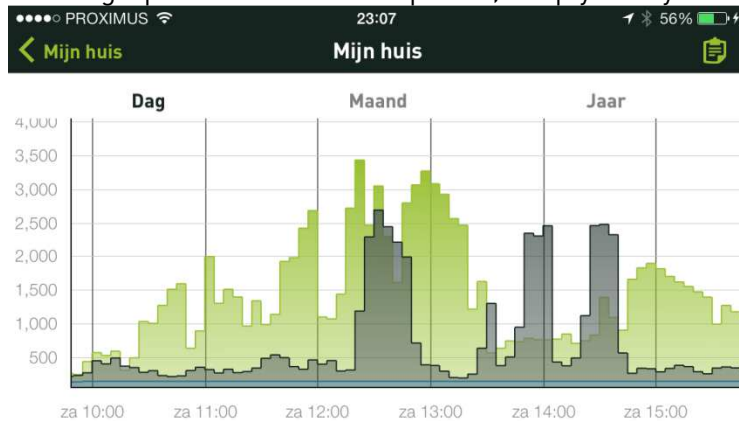
- your current consumption
- your standby consumption
- your solar panel yield




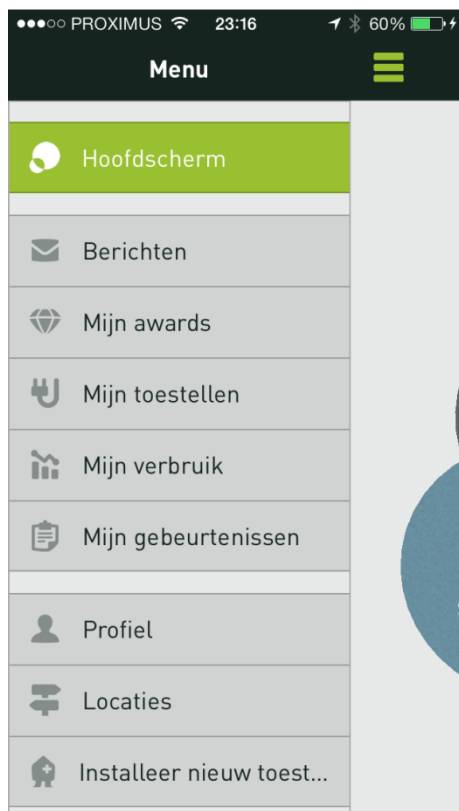
If you click on one of the bubbles, you will see an overview of today's consumption so far. From this screen, you can also select the consumption for the past month or year, or navigate to previous days, months or years.

PROXIMUS 22:59 52% Aanbieder 17:30			
< Mijn huis		< Mijn Huis	
Mijn huis		Mijn Huis	
Dag Maand Jaar		Dag Maand Jaar	
← →		← →	
JE VERBRUIK VANDAAG		JE VERBRUIK VERLEDEN MAAND	
kWh	15,423	kWh	280,161
EUR	3,39	EUR	61,64
JE PRODUCTIE VANDAAG		JE PRODUCTIE VERLEDEN MAAND	
kWh	1,478	kWh	160,630
EUR	0,33	EUR	35,34
12s 11s		12s 11s	

To see graphs for the selected period, simply turn your screen to landscape mode:



To select the menu, click on the menu bar  on the main screen.



Most of the items are self-explanatory, and we will leave you to explore them by yourself.

However, a little more explanation is required for **“My appliances”** and **“My events”**. As we mentioned previously, it takes a little while for smappee to identify its first appliances. Identified appliances can be found under “My appliances”. From this screen, you can also name your appliances. In the screen below, “Find me – 7” does not yet have a name. This screen also shows the consumption of this (as yet unidentified) appliance and the last three times it was switched on or off. If you click on “More....” you can also see a longer list of the events for this appliance.



When you are trying to identify your appliances, the “SEND MESSAGE” function is very useful. If you select this option, you will be sent a message (up to 5 times) each time this appliance switches on or off.



This is an enjoyable way to track down your appliances!

Another easy way to find your appliances is to switch them on or off manually while keeping an eye on the bubble screen. As a result, you will immediately know that “Find me – 11”, for example, is the appliance which you have just switched on.



Please also note that you can select a category when naming your appliances. To do so, select the “Find me” field.

Zoek mij

>

You will then see the following list, from which you can select the appropriate category:

PROXIMUS 00:05 83%

< Zoek mij - 7

Verlichting

Koeling

Koken

Entertainment

Verzorging

Wasbeurt

Verwarming en Airco

Ander

Finally, “**My events**” provides an overview of the activity of your appliances. This shows just how much is going on in your home, and allows you to tackle those unexpected energy-guzzlers!

PROXIMUS 13:56 73%

Alle gebeurtenissen

Wasbeurt - strijk Tue 13:39:13
624 Watt UITgeschakeld

Wasbeurt - was &... Tue 13:35:54
1880 Watt INgeschakeld

Wasbeurt - strijk Tue 13:34:21
663 Watt INgeschakeld

Koken - koffie Tue 13:34:07
878 Watt UITgeschakeld

Koken - koffie Tue 13:29:03
895 Watt INgeschakeld

Koelkast - Keuken Tue 13:28:02
54 Watt UITgeschakeld

Koelkast - Keuken Tue 13:25:06
56 Watt INgeschakeld

We wish you every success with your smappee and feel confident that smappee will soon become part of your everyday life. You will automatically become **more conscious** of how you use energy, which will contribute to a **better environment** for us all. This is the challenge faced by our generation with the **next generations** in mind.

Declaration of Conformity

October 5, 2013

We,

smappee nv
Oude Bellegemstraat 14B
8550 Zwevegem
Belgium

following the provision of the following EC Directives:

- 2006/95/EC The Low Voltage Directive
- 2004/108/EEC The Electromagnetic Compatibility Directive

hereby declare that the product:

smappee monitor-e1

is in conformity with the applicable requirements of the following documents

* Emissions:

Radiated Emission EN 55022 (Class B)
Conducted Emission EN 55022 (Class B)
EN 61000-3-2
EN 61000-3-3

* Immunity:

EN 55024
EN 61000-4-2
EN 61000-4-3
EN 61000-4-4
EN 61000-4-5
EN 61000-4-6
EN 61000-4-1

* Safety:

EN61010-1 Ed 3.0 (2010-06),
EN61010-2-032 Ed 3.0 (2012-09)

Authorized signatory



Hans Delabie
Chief Operating Officer